

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the make-up of a catalyst in a reactor suitable for reactions which take place in three-phase systems according to the Fischer-Tropsch technique, to compensate losses in activity and material during the overall production cycle, which comprises:

- a) incorporating the catalyst, previously reduced, in a matrix of paraffinic waxes, solid at room temperature;
- b) melting and collecting the paraffinic matrix [(7)] in a vessel [(C)], maintained at a high temperature, together with a diluent [(8)] which is miscible with the molten paraffinic matrix and which is in liquid form both under the conditions present in the vessel and at room temperature, wherein a stream of a first inert gas [(3')] is distributed in said vessel [(C)] from the bottom so as to obtain a sufficiently homogeneous suspension;
- c) pressurizing the vessel [(C)] in which the complete melting of the paraffinic matrix has been effected at a pressure higher than that of a conditioning reactor [(D)] maintaining the system fluidized by the continuous introduction of said first inert gas [(3')] from the bottom of said vessel [(C)];
- d) transferring, due to the pressure change, a diluted solution [(9)] from the vessel [(C)] under pressure to the conditioning reactor [(D)], initially empty, maintained at a temperature higher than or equal to that present in the vessel [(C)] and flushed in turn from the bottom with a second inert gas [(5)];
- e) regulating the temperature and pressure in the conditioning reactor [(D)] at values ranging from 200-230°C and 0.5-1.5 MPa;

- f) gradually substituting the second inert gas $[(5')]$ with a synthesis gas $[(6')]$ up to a concentration of inert gas ranging from 5 to 50% by volume and maintaining a partial water pressure (co-product of the Fischer-Tropsch synthesis reaction) lower than 1.0 MPa;
- g) maintaining the conditions of point (f) for 24-72 hours;
- h) gradually increasing the pressure inside the conditioning reactor $[(D)]$ to a value higher than the pressure of a main reactor $[(B)]$;
- i) gradually reducing the concentration of said second inert gas to zero;
- j) gradually increasing the reaction temperature until reaching values ranging from 200 to 350°C;
- k) after completing the conditioning phase, transferring $[(10)]$ the suspension from the conditioning reaction vessel $[(D)]$ to the main reactor $[(B)]$, which is running under normal operating conditions, by means of a pressure change.

Claim 2 (Original): The process according to claim 1, wherein the catalyst is englobed in paraffinic waxes in the form of pellets wherein the quantity of wax ranges from 30 to 70% by weight.

Claim 3 (Previously Presented): The process according to claim 1, wherein the catalyst comprises Co dispersed on a solid carrier comprising at least one elemental oxide, wherein the element in the elemental oxide is selected from the group consisting of Si, Ti, Al, Zr, Mg and combinations thereof.

Claim 4 (Original): The process according to claim 3, wherein the cobalt is present in the catalyst in quantities ranging from 1 to 50% by weight with respect to the total weight.

Claim 5 (Previously Presented): The process according to claim 1, wherein the catalyst is used in the form of a finely subdivided powder, with an average diameter of the granules ranging from 10 to 250 μm .

Claim 6 (Previously Presented): The process according to claim 2, wherein the catalyst englobed in the paraffinic matrix is brought to a temperature which is greater than or equal to 150°C and diluted with a diluent liquid at those temperatures, and also at room temperature, until a concentration of solid ranging from 10 to 50% by weight, is obtained.

Claim 7 (Previously Presented): The process according to claim 6, wherein the diluent comprises an oligomer of C₆-C₁₀ α -olefins.

Claim 8 (Currently Amended): The process according to claim 1, wherein the pressure in a charging vessel [(A)] is higher than that present in the main reactor [(B)] by about 0.2-0.4 MPa.

Claim 9 (Withdrawn): A process for the shut-down of a reactor (B) in which reactions take place in multiphase systems according to the Fischer-Tropsch technology, wherein a gaseous phase, comprising CO and H₂, is bubbled into a suspension of a solid in the form of particles in a liquid, which comprises the following operating phases:

- i. gradually stopping the feeding of synthesis gas (6) and its gradual substitution with inert gas (5) ;
- ii. optionally reducing the operating pressure and temperature present inside the reactor (B); and

- iii. discharging (4) of the suspension contained in the reactor (B) and in the units associated therewith (E), and its recovery in the vessel (A) heated and flushed with inert gas (3), wherein the transfer is effected by the difference in pressure, the vessel (A) having been previously brought to a pressure at least 3 bars lower than the reactor (B).

Claim 10 (Withdrawn): The process according to claim 9, wherein the vessel (A) is designed to have a capacity which is such as to contain the volume of suspension present in the reactor (B) and in the other units (E), associated with the treatment of the suspension, at the moment of shut-down.

Claim 11 (Withdrawn): A process for the running of a temporary shut-down phase of a reactor (B) wherein reactions are effected which take place in multiphase systems according to the Fischer-Tropsch technology, wherein a gaseous phase, comprising CO and H₂, is bubbled into a suspension of a solid in the form of particles in a liquid, which comprises:

1. gradually stopping the feeding of synthesis gas (6) and gradual substitution with inert and/or reducing gas (5) to keep the solid dispersed in the suspension; and
2. optionally decreasing the operating temperature and pressure.

Claim 12 (Withdrawn): The process according to claim 11, wherein the reactor (B) is kept on-line with the treatment section of the suspension (E) which is completely recycled (11) and (12), to the reactor without the extraction of products.

Claim 13 (Withdrawn): The process according to claim 11, wherein the reactor (B) is taken off-line from the units (E) after emptying the suspension from the equipment (E) directly connected to the reactor (B).

Claim 14 (Withdrawn): The process according to claim 13, wherein the reactor (B) has a capacity which is such as to also contain the volume of suspension present in the units (E) at the moment of temporary shut-down.

Claim 15 (Withdrawn): The process of Claim 9, wherein the process comprises reducing the operating pressure and temperature present inside the reactor (B).

Claim 16 (Withdrawn): The process of Claim 11, wherein the process comprises decreasing the operating temperature and pressure.

Claim 17 (Previously Presented): The process according to claim 2, wherein the catalyst comprises Co dispersed on a solid carrier comprising at least one elemental oxide, wherein the element in the elemental oxide is selected from the group consisting of Si, Ti, Al, Zr, Mg and combinations thereof.

Claim 18 (Previously Presented): The process according to claim 17, wherein the cobalt is present in the catalyst in quantities ranging from 1 to 50% by weight with respect to the total weight.

Claim 19 (Currently Amended): The process according to claim 2, wherein the pressure in a charging vessel [(A)] is higher than that present in the main reactor [(B)] by about 0.2-0.4 MPa.

Claim 20 (Currently Amended): The process according to claim 3, wherein the pressure in a charging vessel [(A)] is higher than that present in the main reactor [(B)] by about 0.2-0.4 MPa.